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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,235	03/12/2004	Sze-Mocy Voon	200314056-1	8851

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FORT COLLINS, CO 80527-2400

EXAMINER

BUI, HUNG S

ART UNIT	PAPER NUMBER
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2841

MAIL DATE	DELIVERY MODE
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06/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/800,235

Applicant(s)

VOON ET AL.

Examiner

Hung S. Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-20 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/12/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The oath/declaration filed on 07/19/2005 is acceptable.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "a processor" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 13-15 are objected to because of the following informalities: in claim 13, lines 7-8, "a device external" should be corrected as – an external device --. In claim 15, lines 7-8, "a device external" should be corrected as – an external device --. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-7, 10-11, 13, 15-18, 24, 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Skowronski [US 5,655,933].

Regarding claim 1, Skowronski discloses a housing (a housing creates from a top element 22 and a bottom element 20 as shown in figures 1 and 9) for an electronic system, the housing comprising:

- an interface opening (46, figure 1, column 4, line 44) operable to expose an interface connectors (14, figure 1; column 3, line 50) that is mounted to the

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interface held by the housing and coupled to circuitry (a circuit board 18 as shown in the figure 1) disposed within the housing; and

- a passage (a space pipe connect from an opening 44 through an opening 46, or an opening 48, as shown in figures 1 and 9) having a first opening (46, figure 1) adjacent to the interface opening, having a second opening (44, figure 1, column 4, line 43) and a third opening (48, figure 1, column 4, line 45), wherein at least one of the openings opens to an environment outside the housing without exposing the circuitry to the outside environment (figures 1 and 9), the passage being operable to hold a communication medium (14a, 12a and 16a, figure 1, column 3, lines 59-62) that includes a communication connector (12, figure 1, column 4, line 12) attached to the interface connector and that extends from the interface connector through the first opening and the second opening.

Regarding claim 3, Skowronski discloses the housing including a back comprising the interface opening (48, figure 9); and a top (22, figure 1, column 4, line 29) covering the passage.

Regarding claim 4, Skowronski discloses the third opening (48, figure 9, column 4, line 45) being adjacent the second opening (44, figure 9, column 4, line 43).

Regarding claim 5, Skowronski discloses the third opening is adjacent to the second opening, and the housing includes a top (22, figure 1) covering the passage, and a cap operable to close the third opening (figures 1 and 9).

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Regarding claims 6-7, Skowronski discloses the passage being substantially straight/rectangular (figures 1 and 9).

Regarding claim 10, Skowronski discloses the passage being tapered (figures 1 and 9).

Regarding claim 11, Skowronski discloses the housing further comprises a storage compartment (a compartment creates by an element 32, as shown in figure 9), the second opening (44, figure 9) opens to the storage compartment (see figure 9).

Regarding claims 13 and 15, Skowronski discloses an electronic system (figures 1 and 9), comprising:

- a circuitry (a circuit board 18, as shown in figure 1) having an interface (an interface discloses as connector connected to the circuit board as shown in figure 1); and
- a housing (a housing creates from a top element 22 and a bottom element 20 as shown in figures 1 and 9) that holds the circuitry, the housing defining an interface opening (46, figure 1, column 4, line 44) in which the interface is mounted and defining a passage (a space pipe connect from an opening 44 through an opening 46, or an opening 48, as shown in figures 1 and 9) having a first opening (46, figure 1) adjacent to the interface opening, having a second opening (44, figure 1, column 4, line 43) and a third opening (48, figure 1, column 4, line 45), the passage being operable to hold a communication medium (14a, 12a and 16a, figure 1, column 3, lines 59-62) coupled to the interface and to a device external to the housing without

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exposing the circuitry to the outside environment (figures 1 and 9), wherein the medium extends from the interface through the first opening, and the second opening.

Regarding claim 26, Skwronski discloses wherein the housing includes a top that covers the passage to form a tunnel (see figure 1).

Regarding claim 27, Skwronski further discloses wherein the housing includes a top releasably fastened (fastener secured the housing through holes 52 as shown in figure 1) to at least one of the sidewalls to convert the passage into a tunnel (column 4, lines 48-51).

Regarding claims 16 and 24, the claimed method steps are inherit in the product structure of the claims 1.

Regarding claim 17, the claimed method steps are inherit in the product structure of the claim 11.

Regarding claim 18, the claimed method steps are inherit in the product structure of the claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 8-9, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skwronski in view of Schmidt et al. [US 6,368,149].

Regarding claims 8-9, Skwronski discloses the instant claimed invention except for the area of the first opening is not equal the area of the second opening.

Schmidt et al. disclose a housing assembly (100, figure 1, column 2, line 54) having a first opening (126, figure 1, column 2, line 59) and a second opening (122, figure 1, column 2, line 59), wherein the first opening is different and smaller than the second opening (see figure 2b).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the different openings design of a passage of Schmidt et al., in Skwronski, for the purpose of providing various openings which can hold various kind of connectors.

The specific area of each opening depends on the requirement of the manufacturing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to design consideration based on the area needed being used for holding a various kind of connectors through the openings.

Regarding claim 12, Skwronski disclose the housing further comprises a storage compartment (an element block 32, as shown in figure 9), an includes a top (22, figure 1) covering the passage (see figure 1); and the third opening is located on the back of the housing, and the second opening opens to the storage compartment (see figure 9).

Skwronski discloses the instant claimed invention except for the third opening is located on the top.

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Schmidt et al. further disclose the housing including a third opening (215, figure 1) being mounted on a top of the housing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the third opening on the top of the housing of Skwonski, as suggested by Schmidt et al., for the purpose of facilitating the assembly of the housing with various kinds of connectors.

Regarding claim 22, Skwronski discloses the instant claimed invention except for the communication medium extends through the inter opening.

Schmidt et al. disclose a communication medium (190, figure 1, column 3, line 55) extends through the interface opening (126, figure 1, column 2, line 59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the communication medium connecting design of Schmidt et al., in Skwronski, for the purpose of providing interconnection from the housing to an external device.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skwonski in view of Campell, III [US 4,578,702].

Regarding claim 14, Skwronski disclose the instant claimed invention except for the communication medium being a cable.

Campell, III discloses a communication medium being a cable (46, 47, figure 4, column 4, lines 23-24).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cable design of Campell, III, in Skwronski, for the purpose of enabling installation the wire in the electronic system because the wire is flexibility.

9. Claims 19-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skwronski in view of Page et al. [US 6,801,787].

Regarding claims 19-20 and 23, Skwronski disclose the instant claimed invention except for at least one external device disposed on top and in of a storage compartment defined by the housing.

Page et al. disclose an electronic device (100, figure 1, column 5, line 15) having a housing body (108, figure 1) defined a storage compartment (see figure 1) and at least one external device (101, figure 1, column 5, line 18) disposed on top and in the storage compartment of the housing body.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use mount an external device on top of the electronic device which includes the passage therein (**as claim 23**) of Skwronski, as suggested by Page et al., for the purpose of providing communication between the electronic device and the external device.

The claimed method steps would have necessitated by the product structure of these claims.

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10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skwronski in view of Morino et al. [US 6,590,777].

Regarding claim 25, Skwronski discloses an electronic system (figures 1 and 9), comprising:

- a circuitry (a circuit board 18, as shown in figure 1) including an interface (an interface discloses as connector connected to the circuit board as shown in figure 1);
- a housing (a housing creates from a top element 22 and a bottom element 20 as shown in figures 1 and 9) containing the circuitry and having a back that holds the interface (48, figure 9); and
- a passage (a space pipe connect from an opening 44 through an opening 46, or an opening 48, as shown in figures 1 and 9) defined by a portion of the housing that has a sidewall (40, figure 1, column 4, line 24) and a bottom (36, figure 1, column 4, line 55) , the bottom disposed between the passage and the circuitry, the passage having a first opening (46, figure 1, column 4, line 44) adjacent the interface, a second opening (44, figure 1, column 4, line 43), and a third opening (48, figure 1, column 4, line 45), the passage being operable to hold a communication medium (14a, 12a and 16a, figure 1, column 3, lines 59-62) coupled to the interface and to a device external to the housing without exposing the circuitry in the housing to outside environment (figures 1 and 9), wherein the medium extends from the interface through the first opening, and the second opening.

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Skwronski discloses the instant claimed invention except for the circuitry having a processor being mounted thereon.

Morino et al. disclose an electronic device (10, figures 1-2, column 4, line 7) having a circuit board (23, figure 1, column 3, line 65) being mounted therein, wherein the circuit board includes at least one processor (a CPU 25, figure 1, column 3, line 64) being mounted thereon to operation the electronic device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a CPU in the circuit board as well known of Skwronski, as suggested by Morino et al., for the purpose of providing functional operation to the electronic device.

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skwronski.

Regarding claim 28, Skwronski discloses the instant claimed invention except for the system is a personal computer.

The structure of the housing as disclosed by Skwronski with the passage, a cover to hold the interface connectors may be used in electrical device including PDA, laptop, notebook or personal computer.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 3-20 and 22-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- David et al. [US 5,421,741] disclose an electrical connection assembly;
- Wood et al. [US 5,702,345] disclose video laparoscope with sealed video processor module and illumination unit; and
- Weidler [US 4,392,701] discloses tap connector assembly.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on (571) 272-1984. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



05/30/2007

Hung Bui

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